

Title (en)

CHARGE PUMP STEERING SYSTEMS AND METHODS FOR LOOP FILTERS OF PHASE LOCKED LOOPS

Title (de)

VORRICHTUNGEN UND VERFAHREN ZUR STEUERUNG EINER LADUNGSPUMPE FÜR SCHLEIFENFILTER IN PHASENREGELKREISEN

Title (fr)

SYSTEMES DE PILOTAGE DE POMPE DE CHARGE ET PROCEDES POUR FILTRES A BOUCLE PLL

Publication

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Application

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Abstract (en)

[origin: WO9910983A1] Charge pump steering systems and methods force a charge pump of a loop filter of a phase locked loop to charge or discharge a capacitor for a predetermined time that it is independent of the phase detector error signal. Thereafter, the charge pump is activated in response to a phase detector error signal. Accordingly, rather than relying on the error signal to activate a charge pump, the charge pump may be activated for a period of time which will add or remove a requisite amount of charge to or from the loop filter. Decreased lock times can thereby be produced while allowing a reduction of the size and cost of the charge pump. The invention is preferably applied to an integral charge pump in a phase locked loop.

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